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Sect.

British Columbia

N.T.S. AREA 92 F/5 RÉGION DU S.N.R.C.

REF. CU 1 REF.

NAME OF PROPERTY BIG INTERIOR & PTARMIGAN NOM DE LA PROPRIÉTÉ **OBJECT LOCATED** OBJET LOCALISÉ Lat. 49°27'30" Long. 125°33'40" UNCERTAINTY FACTEUR D'INCERTITUDE Long. Mining Division Alberni Clayoquot District Division minière District County Township or Parish Comté Canton ou paroisse

Concession or Range

Concession ou rang

R.

R.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

Tp.

The Big "I" Mines Ltd., 1030 West Georgia St., Vancouver, B.C.

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT
The formation consists of cherty volcanics, impure tuffs, and small bodies of intrusive basalt, overlain by Permian limestone which includes in places some overlying thin-bedded siliceous argillites. The contact of the Bedwell River batholith of quartz-diorite trends southwesterly across the crest of Big Interior Mountain several thousand feet northwest of the cirque. A mass of quartz-diorite, 3/8 of a mile from north to south, is exposed in the northern wall of the cirque; two smaller masses are exposed to the west and southwest of the cirque. Dykes of quartz-diorite up to 50 feet wide are exposed on a spur on the southeast side of the cirque, and numerous smaller dykes of quartz-diorite and of feldspar porphyry are found in and around the cirque.

Limestone outcrops between the intrusive contact on the crest and the mass of quartz-diorite exposed in the north wall of the cirque. A good deal of it is recrystallized but most of it is unmineralized. At some points, notably near the contact at the crest of the mountain, garnet, epidote, amphibole, and other silicates replace basalt and limestone. Mineralization occurs in some of the granitic rocks near the contact zone; in the wall of the quartz-diorite mass at the P,t,0, ,,,,

HISTORY OF EXPLORATION AND DEVELOPMENT HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

The property consists of 4 Crown-granted claims known as the Ptarmigan Group, and adjoining them on the southeast, 4 Crowngranted claims known as the Big Interior Group, covering the highest peak of Big Interior Mountain and the northwestern part of a deep cirque to the southeast of the peak.

The Big Interior group was staked by J.A. Drinkwater and F. Nichol in the fall of 1899. During the following few years the surface was prospected and a 31 foot adit was driven north from the northwest corner of the cirque. The claims were Crowngranted to J.A. Drinkwater and M. Tebo in 1926.

The Ptarmigan group, apparently located after the Big Interior group, was owned by Ptarmigan Mines Ltd., an English company. Apparently the only development work done by this company was a 15 foot rock cut from the end of which an adit was driven 3 feet. Most of their efforts were expended in building a road in order to get supplies to the property. The Ptarmigan group was Crown-granted in 1913.

The Consolidated Mining & Smelting Co. of Canada Ltd. obtained an option on the property in 1919 and during the summer of 1920 a program of geological and topographical surveys and sampling was carried out. The property reverted to the owners in 1921.

Nothing further was done until 1959 when a Toronto group formed the Big Interior Prospecting Syndicate and Nine Peaks Grubstake Syndicate to prospect the property. During the year 2.600 feet of diamond drilling was done in two holes.

In 1960 Kopan Developments Ltd. acquired an option on the property. During the year a program of geological and topographical mapping was carried out and 4,000 feet of diamond drilling in 26 holes was completed. Of 23 holes drilled on the southerly shoulder of the mountain, 18 encountered mineralization.

Big "I" Mines Limited acquired the property from the above named syndicates. During 1964, 4,039 feet of diamond drilling in 7 holes was completed with AXT size core, as well as 779 feet of packsack drilling.

Associated minerals or products -Silver, gold. Minéraux ou produits associés

Mineral Policy Sector, Department of Energy, Mines and Resources, Ottaw Secteur de la politique minérale, ministère de l'Énergie, des Mines et des Ressources, Ottaw DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

north side of the cirque; in rocks of Palaeozoic age at the northeast end of the crest; and in several other locations. The sulphides include chalcopyrite, pyrrhotite, and at a few points, molybdenite. Samples from most of these locations yielded only a trace of copper, although one selected sample taken between the southwest edge of the cirque and the crest of the mountain assayed 0.14 ounces of gold and 3 ounces of silver per ton and 11.1 per cent copper.

The distribution of mineralized sections found in 15 diamond drill holes conforms with a plane striking nearly north-south and dipping 55 to 65 degrees east. If the plane represents a sulphide-bearing zone, it is evident that the true widths indicated by many of the holes are narrow, measuring 5 feet and less.

Three holes, however, indicate true widths up to about 20 feet. It may be significant that these widths seem to correspond to a flattening of dip. One hole, drilled westward from near the bottom of the cirque cored 13 feet of pyrrhotitechalcopyrite-pyrite mineralization in andesite on what could be the downward projection of this plane.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Bulletin 13, Figure 1, Bedwell River-Drinkwater Creek Area, (Geol.), Sc. approx.1:71,280, Dept. of Mines, B.C., 1941.

Map 92 F/5 E, Bedwell, B.C., (Topo.), Sc. 1:50,000.

REMARKS/REMARQUES

Comp./Rev. By
Comp./rév. par

Date
Date
02-66

REFERENCES/BIBLIOGRAPHIE

Sargent, H.; Supplementary Report on Bedwell River Area, Vancouver Island, B.C.; Bulletin No. 13, pp. 61-77, 79, and Fig. 1, Dept. of Mines, B.C., 1941.

Annual Reports, Dept. of Mines, B.C.: 1906, pp. 194-197; 1916, pp. 314-317; 1920, p. 193; 1926, pp. 296, 303; 1959, p. 135; 1960, p. 110; 1964, p. 156.

Mineral Policy Sector; Corporation Files: "Kopan Development Ltd."; "The Big 'I' Mines Ltd.".

BCI -92F-64,65